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10/587,513	04/25/2007	Toshihisa Nakano	2006_1239A	2481

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EXAMINER	
VAUGHAN, MICHAEL R	
ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/587,513	NAKANO ET AL.	
	Examiner	Art Unit	
	MICHAEL R. VAUGHAN	2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 July 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/27/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The instant application having Application No. 10/587,513 filed on 4/25/07 is presented for examination by the examiner.

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been received.

Specification

The disclosure is objected to because of the following informalities: pages 1 and 2 include an inline reference marker to a foreign reference. Simply stating the reference will suffice to incorporate its teachings. There is no need to refer to the document as document 1.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 20 and 21 are rejected under 35 U.S.C. 101 as directed to non-statutory subject matter of software, per se. The claims lack the necessary physical articles or

objects to constitute a machine or manufacture within the meaning of 35 U.S.C. 101. The claim lacks the necessary requirements for programs to be statutory, they must be stored on computer readable medium and executed by a processor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by USP Application Publication 2004/0030898 to Tsuria et al., hereinafter Tsuria.

As per claim 1, Tsuria teaches a terminal device for transferring a right to use content to a portable medium while protecting a copyright of the content, comprising:

a storage unit storing first encrypted content, a device key, and a medium key, the first encrypted content being generated by encrypting the content (0009);

a decryption unit operable to decrypt the first encrypted content using the device key, to generate the content (0009);

a conversion unit operable to perform an irreversible conversion on the generated content, to generate converted content (0021);

an encryption unit operable to encrypt the converted content using the medium key, to generate second encrypted content (0011 and 0021);

a write unit operable to move the medium key and the second encrypted content to the portable medium, and read the device key from the storage unit and write the read device key to the portable medium (0011); and

a key deletion unit operable to delete the device key from the storage unit (0011).

As per claim 2, Tsuria teaches wherein the key deletion unit deletes the device key from the storage unit after the write unit writes the device key to the portable medium (0054), and

the write unit moves the medium key and the second encrypted content to the portable medium after the key deletion unit deletes the device key from the storage unit (0055).

As per claim 3, Tsuria teaches wherein the storage unit further stores key information for encrypting the device key, the encryption unit further encrypts the device key using the key information (0055);

and the write unit writes the encrypted device key to the portable medium, as the device key (0058).

As per claim 4, Tsuria teaches a read unit operable to read the encrypted device key from the portable medium, wherein the decryption unit further decrypts the read encrypted device key using the key information to generate the device key, and stores the generated device key to the storage unit (0058).

As per claim 5, Tsuria teaches an embedment unit operable to embed the device key in the converted content, to generate key-embedded content (0055),

wherein the encryption unit encrypts the key-embedded content using the medium key, to generate the second encrypted content (0058),

the key deletion unit deletes the device key from the storage unit after the embedment unit embeds the device key in the converted content (0059), and

the write unit moves the medium key and the second encrypted content to the portable medium after the key deletion unit deletes the device key from the storage unit (0060).

As per claim 6, Tsuria teaches an extraction unit operable to extract the device key from the key-embedded content, and store the extracted device key to the storage unit, wherein a read unit reads the second encrypted content and the medium key from the portable medium (0061), and

the decryption unit further decrypts the read second encrypted content using the read medium key to generate the key-embedded content, and outputs the generated key-embedded content to the extraction unit (inherent that the 2nd device is able to read the newly received encrypted data as evidenced by its ability to repeat the process to a third device).

As per claim 7, Tsuria teaches a read unit operable to read the device key from the portable medium, wherein the read unit stores the read device key to the storage unit (0060).

As per claim 8, Tsuria teaches a reproduction unit operable to reproduce the content, wherein the decryption unit further reads the first encrypted content and the device key from the storage unit, decrypts the read first encrypted content using the read device key to generate the content, and outputs the generated content to the reproduction unit (0013).

As per claim 9, Tsuria teaches a content protection system for transferring a right to use content from a terminal device to a portable medium while protecting a copyright of the content, the terminal device comprising:

a first storage unit storing first encrypted content, a device key, and a medium key, the first encrypted content being generated by encrypting the content (0009);
a decryption unit operable to decrypt the first encrypted content using the device key, to generate the content (0009);

a conversion unit operable to perform an irreversible conversion on the generated content, to generate converted content (0021);

an encryption unit operable to encrypt the converted content using the medium key, to generate second encrypted content (0011 and 0021);

a write unit operable to move the medium key and the second encrypted content to the portable medium, and read the device key from the first storage unit and write the read device key to the portable medium (0011); and

a key deletion unit operable to delete the device key from the first storage unit, and the portable medium comprising (0011):

a second storage unit operable to store the device key, the medium key, and the second encrypted content received from the terminal device (0017),

wherein the key deletion unit deletes the device key from the first storage unit after the write unit writes the device key to the second storage unit (0054), and

the write unit moves the medium key and the second encrypted content to the portable medium after the key deletion unit deletes the device key from the first storage unit (0055).

As per claim 10, Tsuria teaches wherein the terminal device further comprises: a read unit operable to read the device key form the second storage unit, the read unit stores the read device key to the first storage unit, the portable medium further comprises:

a deletion unit operable to delete at least one of the second encrypted content and the medium key from the second storage unit, and

the read unit reads the device key from the second storage unit after the deletion unit deletes the at least one of the second encrypted content and the medium key from the second storage unit (0059-0061). It is in inherent that the receiving terminal can reverse the encryption process to generate content. The terminal both reads and writes to the portable medium. Therefore it is able to perform sending and receiving which are reciprocal processes to one another.

As per claim 11, Tsuria teaches wherein the first storage unit further stores key information for encrypting the device key (0051),

the encryption unit further encrypts the device key using the key information,

the write unit writes the encrypted device key to the second storage unit as the device key, and after writing the encrypted device key, moves the medium key and the second encrypted content to the second storage unit (0057), and

the second storage unit stores the encrypted device key as the device key (0058).

As per claim 12, Tsuria teaches wherein the terminal device further comprises: a read unit operable to read the encrypted device key from the second storage unit, wherein the decryption unit further decrypts the read encrypted device key using the key information to generate the device key, and stores the generated device key to the first storage unit (0058),

the portable medium further comprises:

a deletion unit operable to delete at least one of the second encrypted content and the medium key from the second storage unit, and

the read unit reads the encrypted device key from the second storage unit after the deletion unit deletes the at least one of the second encrypted content and the medium key from the second storage unit (0059-0061). It is in inherent that the receiving terminal can reverse the encryption process to generate content. The terminal both reads and writes to the portable medium. Therefore it is able to perform sending and receiving which are reciprocal processes to one another.

As per claim 13, Tsuria teaches an embedment unit operable to embed the device key in the converted content, to generate key-embedded content (0055),

the encryption unit encrypts the key-embedded content using the medium key, to generate the second encrypted content (0058),

the key deletion unit deletes the device key from the first storage unit after the embedment unit embeds the device key in the converted content (0059), and

the write unit writes the medium key and the second encrypted content to the second storage unit after the key deletion unit deletes the device key from the first storage unit (0060).

As per claim 14, Tsuria teaches the terminal device further comprises:
an extraction unit operable to extract the device key from the key-embedded content, and store the extracted device key to the first storage unit,

a read unit reads the second encrypted content and the medium key from the second storage unit,

the decryption unit further decrypts the read second encrypted content using the read medium key to generate the key-embedded content, and outputs the generated key-embedded content to the extraction unit (inherent that the 2nd device is able to read the newly received encrypted data as evidenced by its ability to repeat the process to a third device), and

the portable medium deletes the second encrypted content and the medium key from the second storage unit after the terminal device reads the second encrypted content and the medium key from the second storage unit (0061) .

As per claim 15, Tsuria teaches a mobile information terminal,

wherein the mobile information terminal reads, from the portable medium in which the device key, the medium key, and the second encrypted content are stored in the second storage unit, the second encrypted content and the medium key, decrypts the read second encrypted content using the read medium key to generate the converted content, and reproduces the converted content (0060).

As per claim 16, Tsuria teaches another terminal device connected with the terminal device,

wherein the another terminal device comprises: a read unit operable to read, from the portable medium in which the device key, the medium key, and the second encrypted content are stored in the second storage unit, the device key, the medium key, and the second encrypted content (0059);

a deletion unit operable to delete at least one of the medium key and the second encrypted content read by the read unit; and

an acquisition unit operable to acquire the first encrypted content from the terminal device, after the deletion unit deletes the at least one of the medium key and the second encrypted content, the portable medium moves the device key, the medium key, and the second encrypted content to the another terminal device (0060), and

the terminal device further comprises:

a transmission unit operable to transmit the first encrypted content to the another terminal device; and a content deletion unit operable to delete the first encrypted content from the first storage unit (0061).

As per claim 17, Tsuria teaches a portable medium for receiving a right to use content from a terminal device while protecting a copyright of the content, the terminal device including: a storage unit storing first encrypted content, a device key, and a medium key, the first encrypted content being generated by encrypting the content; a decryption unit operable to decrypt the first encrypted content using the device key, to generate the content; a conversion unit operable to perform an irreversible conversion on the generated content, to generate converted content; an encryption unit operable to encrypt the converted content using the medium key, to generate second encrypted content; a write unit operable to move the medium key and the second encrypted content to the portable medium, and read the device key from the first storage unit and write the read device key to the portable medium; and a key deletion unit operable to delete the device key from the first storage unit (0049-0050), the portable medium comprising:

a storage unit operable to store the device key, the medium key, and the second encrypted content (0051).

As per claim 18, Tsuria teaches a content movement method used in a terminal device for transferring a right to use content to a portable medium while protecting a copyright of the content, the terminal device storing first encrypted content, a device key, and a medium key, the first encrypted content being generated by encrypting the content (0009), the content movement method comprising:

a decryption step of decrypting the first encrypted content using the device key, to generate the content (0009);

a conversion step of performing an irreversible conversion on the generated content, to generate converted content (0011);

an encryption step of encrypting the converted content using the medium key, to generate second encrypted content (0011 and 0021);

a write step of moving the medium key and the second encrypted content to the portable medium, and reading the device key from the storage unit and writing the read device key to the portable medium (0021); and

a key deletion step of deleting the device key from the terminal device (0021).

As per claim 19, Tsuria teaches wherein the key deletion step deletes the device key from the terminal device after the write step writes the device key to the portable medium (0054), and the write step moves the medium key and the second encrypted content to the portable medium after the key deletion step deletes the device key from the terminal device (0058).

As per claim 20, Tsuria teaches a content movement program used in a terminal device for transferring a right to use content to a portable medium while protecting a copyright of the content, the terminal device storing first encrypted content, a device key, and a medium key, the first encrypted content being generated by encrypting the content (0009), the content movement method comprising:

a decryption step of decrypting the first encrypted content using the device key, to generate the content (0009);

a conversion step of performing an irreversible conversion on the generated content, to generate converted content (0011);

an encryption step of encrypting the converted content using the medium key, to generate second encrypted content (0011 and 0021);

a write step of moving the medium key and the second encrypted content to the portable medium, and reading the device key from the storage unit and writing the read device key to the portable medium (0021); and

a key deletion step of deleting the device key from the terminal device (0021).

As per claim 21, Tsuria teaches wherein the key deletion step deletes the device key from the terminal device after the write step writes the device key to the portable medium (0054), and the write step moves the medium key and the second encrypted content to the portable medium after the key deletion step deletes the device key from the terminal device (0058).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure is listed on the enclosed PTO-892 form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/Syed Zia/

Primary Examiner, Art Unit 2431